

## NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACT SHEET (Pursuant to NAC 445A.236) May 2005

Permittee Name: Pine Grove Utility Trust

Demar Dahl P.O. Box 2486

Fallon, Nevada 89407

Permit Number: NEV94011

Discharge Location: The Pine Grove Subdivision water treatment plant is located at 2310 Birch Street in

Fallon, Churchill County, Nevada

Latitude: 39° 28' 7"N; Longitude: 118° 49' 03"W Section 35, Township 19 North, Range 28 East

Flow: Not to exceed 38,000 gallons per month

#### General:

The Permittee operates a water treatment plant that provides potable water to the Pine Grove subdivision. The greensand filter (manganese zeolite process by which manganese dioxide in the filter removes soluble manganese) is used to remove manganese and iron from groundwater to meet drinking water standards. The filter must be periodically regenerated with potassium permanganate. The wastestream from the filter results from the treatment process and the filter regeneration.

The Permittee discharges the filter backwash wastestream to a rapid infiltration basin (RIB) for disposal via percolation to the groundwaters of the State of Nevada. Disposal of the potassium permanganate to the RIB is prohibited. The manganese, iron and any particulate matter is expected to be removed in the soil column prior to entering the groundwater. The Permittee is required to monitor two monitoring wells upgradient (Northwest Monitoring Well #1) and downgradient (East Monitoring Well #2) of the RIB to ensure that the shallow aquifer is not negatively affected.

## **Effluent Discharge Limitations:**

<b>Effluent Limitations</b>	<b>Discharge Limitations</b>	Monitoring Requirements	
		Measurement Frequency	Sample
			Type
No. Backwash Cycles/Month	Monitor & Report	Continuous	Count
Backwash Flow; Gallons	Monitor & Report	Monthly	Calculate <sup>1</sup>
Total Flow; Gallons/Month	38,000	Monthly	Calculate <sup>2</sup>

Monitoring Well(s) <sup>3</sup>			
Depth to Groundwater; Feet	Monitor & Report	Quarterly	Discrete
Groundwater Elevation; AMSL	Monitor & Report	Quarterly	Discrete
Total Dissolved Solids (TDS); mg/L	Monitor & Report	Quarterly	Discrete
Manganese; mg/L	Monitor & Report	Quarterly	Discrete
Iron; mg/L	Monitor & Report	Quarterly	Discrete
Ammonia; mg/L	Monitor & Report	Quarterly	Discrete

AMSL: above mean sea level mg/L; milligrams per liter

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- <sup>1</sup>: The total flow that is backwashed during one cycle shall be calculated on a monthly basis by measuring the pump run time (min.) during one backwash cycle multiplied by the pump flow rate (gpm). The pump flow rate shall be estimated utilizing the actual pump curve and the measured pump discharge pressure.
- 2: The total flow in gallons per month shall be calculated by multiplying the number of backwash cycles by the calculated backwash flow per cycle.
- 3: Monitoring Well #1; Monitoring Well #2

# Rationale for Permit Requirements:

Monitoring is required to assess the level of treatment being provided in the soil column, to ensure that the design capacity of the RIB is not exceeded, and to prevent the degradation of groundwaters of the State of Nevada.

# Receiving Water Characteristics:

The receiving waters are the groundwaters of the State of Nevada. Depth to groundwater from the bottom of the RIB is approximately 4 to 6 feet. The groundwater at this location is potable.

Groundwater samples are collected and analyzed quarterly from the two monitoring wells for TDS, manganese, iron, ammonia, depth to groundwater and groundwater elevation. The sampling for ammonia is required by NDEP because of the proximity of the monitoring wells to a wastewater lift station.

### Schedule of Compliance:

The Permittee shall implement and comply with the provisions of the permit upon issuance and the following schedule of compliance, including in said implementation and compliance, any additions or modifications the Administrator may make in approving the schedule of compliance.

- > The Permittee shall achieve compliance with the effluent limitations upon issuance of the permit.
- Within 90 days of the permit issuance date (**September 1, 2005**) an updated Operations and Maintenance Manual shall be submitted to the Division for approval.

### Proposed Determination:

The Division has made the tentative determination to renew the proposed permit, under the provisions prescribed, for a 5-year period.

#### **Procedures for Public Comment:**

Notice of the Division's intent to issue a permit authorizing the facility to discharge to groundwaters of the State of Nevada subject to the conditions contained within the proposed permit, is being sent to the **Lahontan Valley News** for publication. Notice is also mailed to interested persons on our mailing list.

Anyone wishing to comment on the proposed permit can do so in writing for a period of 30 days following the date of the public notice, and must be postmarked, faxed, or e-mailed by 5:00 p.m. on **June 2, 2005**. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator, or any interested agency, person, or group of persons. The request must be filed within the comment period, and must indicate the interest of the person filing the request and the reason(s) why a hearing is warranted.

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Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determined to be appropriate. All public hearings granted by the Division are conducted in accordance with NAC 445A.238. The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Prepared by: James T. Hogan

Staff Engineer II April 27, 2005